# **SPECIAL SPECIFICATION**

# **SECTION 01311S**

# PROJECT SCHEDULE

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#### SPECIAL SPECIFICATION

#### SECTION 01311S

## **PROJECT SCHEDULE**

## PART 1 - GENERAL

## **1.01** DESCRIPTION OF WORK

#### A. SUMMARY

The Contractor shall prepare and maintain a detailed resource loaded progress schedule utilizing Critical Path Method (CPM). This schedule shall be the Contractor's working schedule and used to plan, organize and execute the work, record and report actual performance and progress and outlines how the Contractor plans to complete all remaining work.

The Contractor shall prepare a schedule of values structured in the Construction Specifications Institute (CSI) format for specifications and the P3 template provided by SNL containing the mandatory sort fields and the WBS structure for the project. The contractor may add items to the sort field but may not modify the sort fields. If the contractor adds items to the sort fields the contractor must obtain approval from SNL prior to implementation. A dollar value for each activity in the detailed progress schedule will be tied back to a category in this schedule of values which will be used for monthly payment application and cash flow predictions.

## **1.02** SUBMITTALS

- A. Within twenty-one (21) calendar days after award of contract, the Contractor shall submit for review and approval a detailed critical path progress schedule a tabloid report with CSI codes for each activity including the corresponding proposed dollar values per activity and a copy of the proposed CSI monthly billing format. A CD of the schedule files shall be submitted with the hard copy tabloid (11" x 17") schedule. The schedule produced and submitted shall indicate a project completion date on or before the contract completion date. The contractor's initial submittal shall include the following reports (hard copy and CD):
  - Early start schedule
  - Schedule sorted by CSI divisions and showing budgeted cost with subtotals by subcontractor and project.
  - Activity codes dictionary
  - Summary of resources
  - Summary of cost accounts
  - Cumulative cash flow graphs

Before submission of the schedule to Sandia National Laboratories (SNL), it must be reviewed and signed off by the Prime Contractor's on-site superintendent and a representative from each subcontractor performing at least twenty (20) percent of the contracted work. The schedule will be reviewed by SNL's Project Manager and returned to the Contractor within twenty-one (21) calendar days. Receipt and review of the schedule is a requirement for issuance of the first progress payment.

- B. <u>Updates</u>: The first update shall occur one week after the return of the first submittal schedule to the Contractor. Updates shall be submitted weekly and with each pay application thereafter, and shall be used as the basis for evaluation of monthly progress payments. The Contractor will be required to project month-end status in accordance with SNL's monthly cut-off dates. This is usually 3-5 days prior to the end of the month. The updates shall be in the form of the following:
  - 1. Detailed progress schedule on a CD,
  - 2. Paper copy of a three-week look ahead bar chart
  - 3. Written narrative explaining significant changes in the schedule and their impact to the schedule since the last update. Items should include but not limited to duration changes, logic changes, new activities, milestone, changes, etc.
  - 4. A detailed recovery schedule and narrative recovery plan for any delayed activity on the critical path.

#### PART 2 - PRODUCTS

## **2.01** SOFTWARE

**A.** Contractor is required to use Primavera Project Planner (P3) version 3.0 or later. Suretrack is not acceptable.

#### 2.02 SCHEDULE

The schedule shall be printed on tabloid size sheets (11" x 17"), large enough to clearly show all activities. All schedules shall have a title block including the date, revision number, contract number, page number, Contractor name and project title.

#### PART 3 - EXECUTION

## 3.01 NETWORK DETAIL

- A. Schedule: The schedule shall show all activities required to complete the project and their dependency relationships. Include intermediate milestones as necessary to track important events such as phased completion dates, permanent power, outages, Sandia furnished equipment delivery, etc., and all items specified in the "Other Conditions" of the contract. Each activity should have an associated activity identification, activity description, duration, early and late start and finish dates, and total float. Logic relationships may include finish to start, start-to-start, start to finish, and finish to finish with lags times as required.
- B. Required Activities: Activities to be included in the schedule shall be: construction activities; submittal/shop drawing preparation activities; submittal/shop drawing review activities; purchase, manufacture/fabricate, and delivery for major equipment and materials activities; critical inspection activities; utility shutdown activities; and close-out activities.
- C. Activity Detail: The activities shall meet the following criteria:
  - 1. Unique numbering system utilizing CSI format along with descriptive title.
  - 2. Whole day units.
  - 3. Construction activities shall have a maximum duration of 15 days.
  - 4. Cost loading of each activity.
  - 5. Resource loading of each activity (labor, equipment, etc.)
  - 6. Activity codes will map to the owners Work Breakdown Structure (WBS) with no activities including multiple WBS elements.

## 3.02 UPDATING

- A. The updates will cover:
  - 1. Actual start/finish dates
  - 2. Activity percent complete/remaining duration
  - 3. Cost value of work reported in place.
  - 4. Duration changes.
  - 5. Logic changes.

- 6. Reasons for changes and associated impact (Narrative)
- 7. Recovery schedules and narrative plan for all late activities on the critical path
- B. Sandia and the Prime Contractor will perform a joint update of the schedule weekly to record actual start dates, actual finish dates, percent complete, and any delays or changes to the schedule. Attendance of prime subcontractors will be determined jointly by Sandia and the Prime Contractor.

## 3.03 CHANGE ORDERS

A. A written time impact analysis illustrating the influence of each change or delay on the current contract schedule completion date shall be submitted by the Contractor for review by Sandia. This narrative shall be included with each monthly update as specified in 1.02 (B) of this specification. Negotiations for time extensions shall be considered only to the extent that equitable time adjustments for the activity or activities affected exceed the total or remaining float along the path of activities at the time of actual delay or at the time notice to proceed was issued for the change. The contractor shall create a new resource loaded activity for each approved change.

END OF SECTION